

Title (en)

Actuator for moving body in tube, method for controlling the same, and endoscope

Title (de)

Aktuator zur Bewegung eines Körpers in einem Rohr, Steuerverfahren dafür und Endoskop

Title (fr)

Actionneur pour déplacer un corps dans un tube, procédé de contrôle associé et endoscope

Publication

EP 2223647 A1 20100901 (EN)

Application

EP 10154706 A 20100225

Priority

- JP 2009044572 A 20090226
- JP 2010001364 A 20100106

Abstract (en)

An aspect of the actuator for the moving body includes: a first expansion/contraction member (22, 94) which includes a first portion that fills between the moving body in tube and the tube wall at the time of being expanded to come into contact with the tube wall, and a second portion that is brought into contact with the tube wall to generate propulsive force, and a part of which is fixed to the moving body in tube; a drive device (34, 36, 76, 78) which drives the first expansion/contraction member (22, 94); and a control section (30, 32, 72, 74, 80) which controls the first expansion/contraction member and the drive device, and is characterized in that the control section performs control so that the first portion of the first expansion/contraction member is made to become the second portion by the drive by the drive device so as to change the relative position between the moving body in tube and the tube wall.

IPC 8 full level

A61B 1/31 (2006.01); **A61M 25/01** (2006.01); **G02B 23/24** (2006.01)

CPC (source: EP US)

A61B 1/00156 (2013.01 - EP US); **A61B 1/31** (2013.01 - EP US)

Citation (applicant)

- JP H119545 A 19990119 - OLYMPUS OPTICAL CO
- JP 2006223895 A 20060831 - OLYMPUS CORP

Citation (search report)

- [X] US 4148307 A 19790410 - UTSUGI MIKIO
- [E] EP 2158837 A2 20100303 - FUJIFILM CORP [JP]
- [A] US 2855934 A 19581014 - DAUGHADAY JR WILLIAM E

Cited by

WO2012079565A3

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

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DOCDB simple family (application)

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